

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P572167

Luminaire Tested: 24ID-50-L835-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572167
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2109-397-8)
Test Lab: INNOVATION CENTER
Issue Date: 10/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 24ID-50-L835-DBD
Description: 5000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 3500K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

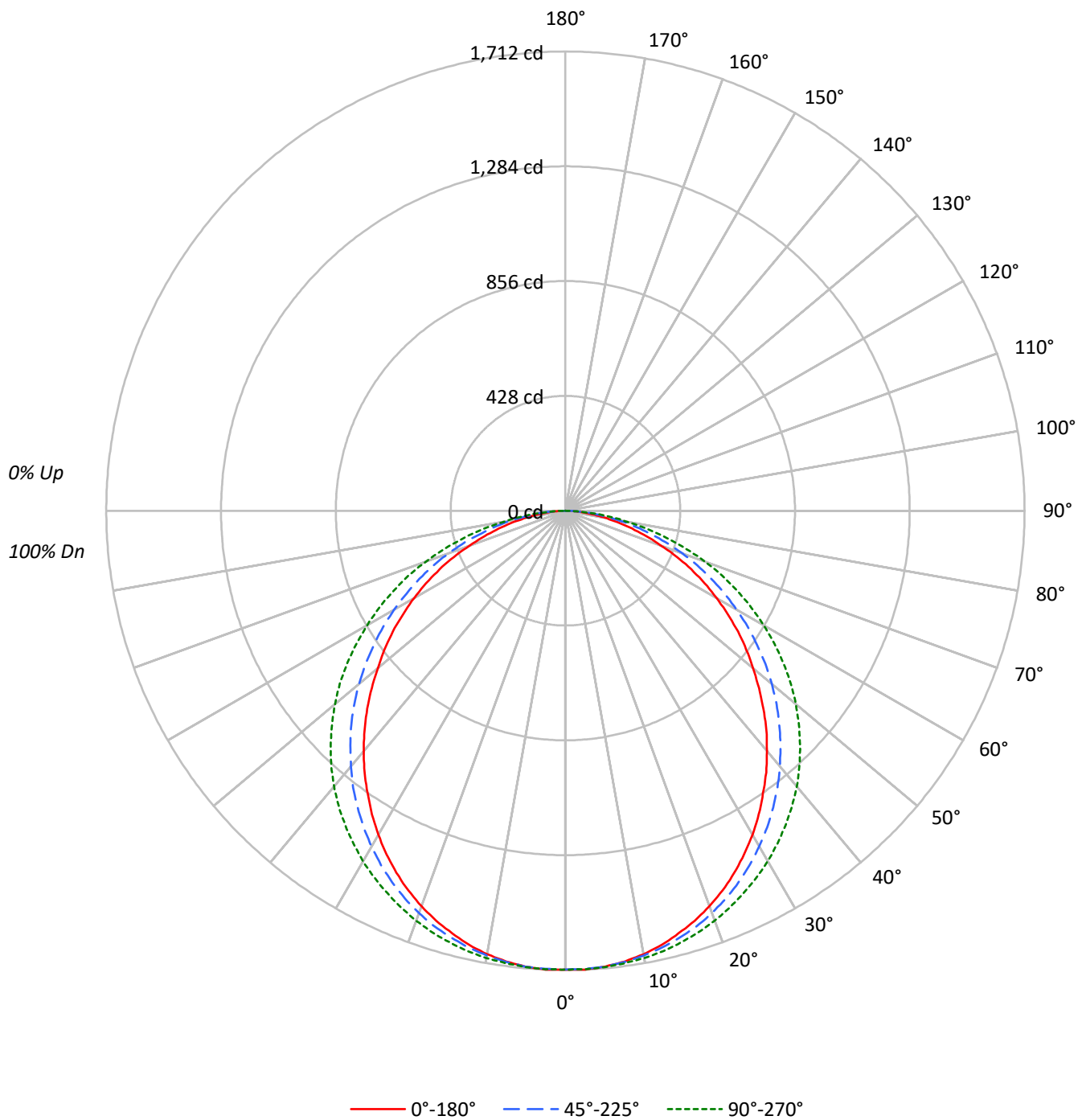
Lumens per Lamp: N/A
Luminaire Lumens: 4880.0 lumens
Efficiency: N/A
Efficacy: 110.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 44.1
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P572167

CATALOG NUMBER: 24ID-50-L835-DBD

Luminous Intensity Polar Plot



TEST NUMBER: P572167

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20					20				20
RC	80				70				50					30				10
RW	70	50	30	10	70	50	30	10	50	30	10			50	30	10		0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111			106	106	106		100
1	109	104	100	96	106	102	98	94	97	94	91			93	91	88		84
2	99	90	84	78	96	89	82	77	85	80	75			82	77	73		70
3	90	79	71	65	87	78	70	64	75	68	63			72	66	62		58
4	82	70	61	55	80	69	61	54	66	59	54			64	58	53		50
5	76	63	54	47	74	62	53	47	59	52	46			58	51	46		43
6	70	56	47	41	68	56	47	41	54	46	40			52	45	40		38
7	65	51	42	36	63	50	42	36	49	41	36			47	41	36		33
8	60	47	38	32	59	46	38	32	45	37	32			43	37	32		30
9	56	43	35	29	55	42	34	29	41	34	29			40	33	29		27
10	53	40	32	26	52	39	31	26	38	31	26			37	31	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2301	2301	2301
5°	2296	2286	2289
10°	2277	2265	2280
15°	2247	2241	2270
20°	2213	2214	2260
25°	2170	2179	2247
30°	2116	2137	2237
35°	2051	2089	2221
40°	1985	2034	2204
45°	1907	1972	2174
50°	1819	1902	2136
55°	1739	1814	2082
60°	1633	1718	2007
65°	1512	1605	1907
70°	1338	1461	1762
75°	1157	1259	1548
80°	915	1023	1211
85°	631	633	727

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 2174 cd/sqm

TEST NUMBER: P572167

CATALOG NUMBER: 24ID-50-L835-DBD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.1	3.3
10°-20°	465.3	9.5
20°-30°	705.3	14.5
30°-40°	848.4	17.4
40°-50°	875.8	17.9
50°-60°	787.0	16.1
60°-70°	599.2	12.3
70°-80°	344.0	7.1
80°-90°	92.8	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1332.7	27.3
0°-40°	2181.1	44.7
0°-60°	3843.9	78.8
0°-90°	4880.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4880.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1710	1710	1710	1710	1710	
5°	1706	1707	1706	1704	1707	162
15°	1631	1639	1647	1658	1666	460
25°	1490	1504	1528	1560	1572	686
35°	1285	1308	1350	1409	1431	804
45°	1044	1068	1128	1206	1238	805
55°	785	806	871	955	993	701
65°	517	541	600	670	706	512
75°	257	281	322	368	390	273
85°	60	70	82	87	92	70
90°	0	0	0	0	0	

TEST NUMBER: P572167

CATALOG NUMBER: 24ID-50-L835-DBD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1710.5	1710.5	1710.5	1710.5	1710.5
2.5°	1712.1	1712.1	1708.9	1707.3	1710.5
5°	1705.8	1707.3	1705.8	1704.2	1707.3
7.5°	1694.6	1696.2	1696.2	1697.8	1701.0
10°	1678.8	1682.0	1683.5	1688.3	1693.1
12.5°	1658.2	1661.3	1667.7	1675.6	1682.0
15°	1631.2	1639.1	1647.0	1658.2	1666.1
17.5°	1602.6	1612.1	1624.8	1639.1	1648.6
20°	1569.3	1580.4	1596.3	1615.3	1626.4
22.5°	1531.2	1545.5	1564.5	1588.3	1601.0
25°	1490.0	1504.2	1528.0	1559.8	1572.5
27.5°	1443.9	1459.8	1488.4	1524.9	1542.3
30°	1394.8	1412.2	1445.5	1490.0	1509.0
32.5°	1342.4	1361.4	1399.5	1450.3	1470.9
35°	1285.3	1307.5	1350.3	1409.0	1431.2
37.5°	1229.7	1251.9	1299.5	1363.0	1388.4
40°	1169.4	1193.2	1244.0	1313.8	1342.4
42.5°	1109.1	1129.8	1186.9	1261.5	1291.6
45°	1044.1	1067.9	1128.2	1205.9	1237.7
47.5°	979.0	1004.4	1067.9	1147.2	1180.5
50°	912.4	939.4	1004.4	1085.3	1121.8
52.5°	850.5	872.7	939.4	1021.9	1059.9
55°	785.4	806.1	871.1	955.2	993.3
57.5°	717.2	741.0	806.1	885.4	923.5
60°	650.6	674.4	736.3	815.6	853.7
62.5°	585.5	607.7	668.0	744.2	782.3
65°	517.3	541.1	599.8	669.6	706.1
67.5°	450.6	476.0	531.6	595.0	633.1
70°	379.2	407.8	461.7	520.5	550.6
72.5°	315.8	342.7	391.9	444.3	472.9
75°	257.1	280.9	322.1	368.1	390.3
77.5°	198.3	223.7	260.2	295.1	312.6
80°	146.0	169.8	198.3	222.1	230.1
82.5°	100.0	117.4	138.0	150.7	161.8
85°	60.3	69.8	82.5	87.3	92.0
87.5°	25.4	28.6	33.3	31.7	33.3
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P572167

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	13.50	15.14	13.87	15.46	15.77	14.97	16.61	15.33	16.93	17.24
	3H	15.07	16.55	15.44	16.88	17.24	16.87	18.35	17.24	18.68	19.04
	4H	15.59	16.99	15.98	17.33	17.71	17.57	18.97	17.97	19.32	19.69
	6H	15.92	17.21	16.33	17.58	17.97	18.06	19.36	18.48	19.73	20.12
	8H	16.00	17.24	16.42	17.63	18.03	18.21	19.45	18.63	19.84	20.23
	12H	16.04	17.23	16.47	17.61	18.04	18.29	19.47	18.72	19.86	20.29
4H	2H	14.25	15.65	14.65	16.00	16.38	15.42	16.82	15.82	17.17	17.55
	3H	16.02	17.20	16.43	17.59	17.99	17.54	18.71	17.95	19.11	19.51
	4H	16.65	17.71	17.08	18.12	18.56	18.37	19.44	18.80	19.85	20.28
	6H	17.08	18.01	17.53	18.45	18.90	19.00	19.93	19.45	20.37	20.82
	8H	17.19	18.06	17.65	18.51	18.97	19.18	20.05	19.64	20.50	20.96
	12H	17.26	18.05	17.74	18.52	18.99	19.30	20.08	19.78	20.56	21.03
8H	4H	17.03	17.90	17.49	18.34	18.80	18.57	19.44	19.03	19.88	20.34
	6H	17.57	18.29	18.06	18.78	19.25	19.29	20.02	19.78	20.50	20.98
	8H	17.73	18.38	18.24	18.89	19.37	19.54	20.19	20.05	20.69	21.18
	12H	17.85	18.42	18.35	18.91	19.47	19.71	20.28	20.21	20.77	21.33
12H	4H	17.08	17.86	17.56	18.34	18.80	18.58	19.36	19.05	19.83	20.30
	6H	17.64	18.29	18.15	18.80	19.28	19.31	19.96	19.82	20.46	20.95
	8H	17.86	18.43	18.36	18.92	19.48	19.60	20.17	20.11	20.66	21.22

END OF REPORT